

**Onur DEMIRKAYA**

Mobile: +1(812) 606-3642

Email: [onurd2@illinois.edu](mailto:onurd2@illinois.edu)

111 E Healey Apt 306 Champaign, IL, 61820

**ACADEMIC BACKGROUND**

2017-	<b>University of Illinois at Urbana-Champaign</b> Ph.D. in Educational Psychology/Queries	<b>Urbana-Champaign, IL</b>
2017-	<b>University of Illinois at Urbana-Champaign</b> MS. in Applied Statistics	<b>Urbana-Champaign, IL</b>
2015-2017	<b>Boston College</b> Ed.M. in Educational Research, Measurement, and Evaluation	<b>Boston, MA</b>
2005-2012	<b>Middle East Technical University</b> <b>Faculty of Education, Department of Secondary Science and Mathematics</b> MSc. & BS. in Physics Education	<b>Ankara, Turkey</b>

**PROFESSIONAL EXPERIENCE**

2019-2020	<b>University of Illinois at Urbana-Champaign</b> <b>Teaching Assistant</b> Grading and holding office hours for EPSY-580 Statistical Inference & EPSY-581 Applied Regression	<b>Urbana-Champaign, IL</b>
2013-2014	<b>Turkey Ministry of Education</b> <b>Physics Teacher in Cizre Technical and Vocational High School</b> <i>Taught physics from ninth grade to twelfth grade, intensive physics courses for high stake national exam, managing school library, director of physics teacher community in the school, extracurricular activities such as picnic, football match</i>	<b>Sirnak, Turkey</b>
2012-2013	<b>Turkey Ministry of Education</b> <b>Physics Teacher in Cihanbeyli Anatolian High School</b> <i>Taught physics from ninth grade to twelfth grade, intensive physics courses for high stake national exam, managing school physics laboratory.</i>	<b>Konya, Turkey</b>
2011-2012	<b>Dr. Binnaz Ege Anatolian High School</b> <b>Assistant Physics Teacher (Intern)</b> <i>Responsible for assisting in the instructional improvement of students under the direction and guidance of the head teacher. Observing physics classes, developing and scoring exams, preparing lecture plans and prepared weekly reports related with class structure and classroom management.</i>	<b>Ankara, Turkey</b>

**ACADEMIC PROJECTS**

- ❖ **Demirkaya, O.** & Zhang Jinming (2020, April) Item Preknowledge Detection Using Response and Response Time. Submitted proposal for 2020 NCME, San Francisco, CA.
- ❖ **Demirkaya, O.,** Bezirhan, U. & Chang, H.H. (2018, July) Effect of Missing Data on Detecting Nonuniform DIF. Paper presented at the international meeting of Psychometric Society, New York, NY, USA.
- ❖ A coursework: American Sign Language MNIST Data: A Comparison of Classification Models in Machine Learning
- ❖ A coursework: Efficacy of Logistic Regression and Mantel-Haenszel Methods for examining DIF/UIUC
- ❖ A proposal: Efficiency of cognitive conflict strategy to eliminate students' misconceptions in physics education / BC
- ❖ A qualitative study proposal: Alternative assessment literacy of physics teachers: Case of Turkey/BC
- ❖ A Critical Analysis of NECAP Science 2010-2011 Technical Report / BC
- ❖ A proposal: Efficiency of context-based instructional method in 10<sup>th</sup> grade physics education / BC

- ❖ Context-based instructional material development for 11<sup>th</sup> grade physics students / METU  
Final project for graduation
- ❖ An Analysis on Physics Textbook: *A critique on Turkey national education physics curricula for 9<sup>th</sup> grade students / METU*

#### WORKSHOPS/CERTIFICATES

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- ❖ June 18-20, 2018 NEAP Data Training Workshop and Certificate

#### SKILLS

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**Languages:** R

**Statistical Analysis Tools:** SAS, SPSS, BILOG, G\*Power, Power Up

#### MEMBERSHIPS&VOLUNTEER ACTIVITIES

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**2018 - Current** Student member of International Psychometric Society

**2012 - Current** Member of METU Alumni Organization

**2013 - 2014** Laborer of Education Union in Turkey

**2010 - 2011** Education Volunteers Foundation of Turkey (TEGV)

**2006 - 2012** METU Student Society of Education

**2006 - 2012** METU Student Society of Physics

#### HONORS/AWARDS/SCHOLARSHIPS

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**2016 - 2017** **Boston College tuition scholarship**  
The award due to my qualification and recommendation by my department chair

**2014 - Present** **Turkey Ministry of Education Scholarship**  
The most prestigious educational scholarship with full financial support to study M.Ed. and Ph.D. in the U.S.

**2010 - 2012** ***METU Alumni Scholarship***

**2010 - 2011** ***Dean's Honor List (METU)***

**2005 - 2012** ***Turkey Ministry of Education Scholarship***